

10/588364

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number  
**WO 2005/074583 A2**

- (51) International Patent Classification: **Not classified**
- (21) International Application Number:  
PCT/US2005/002971
- (22) International Filing Date: 3 February 2005 (03.02.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/541,371 3 February 2004 (03.02.2004) US
- (71) Applicant (for all designated States except US): **HYDROPHILIX CORPORATION** [US/US]; P.O. Box 54, West Newbury, MA 01985 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **THOMSON, Timothy** [US/US]; 124 Main Street, West Newbury, MA 01985 (US).
- (74) Agent: **EVANS, Barry**; Kramer Levin Naftalis & Frankel LLP, 919 Third Avenue, New York, NY 10022 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FOAM COMPOSITE FOR ABSORPTION OF HYDROCARBON AND PROCESS FOR MAKING SAME

(57) Abstract: A foam composite adapted to remove sparingly soluble hydrocarbon contaminants from water is provided. The adapted foam composite comprises a scaffold of an open cell hydrophobic polyurethane foam having a plurality of pores with a plurality of surfaces which have a coating of hydrophobic polyurethane disposed thereupon. The foam composite may be made by preparing a hydrophobic polyurethane prepolymer comprising the reaction product of a C8-C12 monohydric alcohol with a polyisocyanate, contacting an open cell hydrophobic polyurethane foam having a plurality of pores having a plurality of surfaces with the hydrophobic polyurethanes prepolymer and a polyol, and curing the prepolymer to form a coating of hydrophobic polyurethane on the surfaces of the pores of the hydrophobic polyurethane foam.



WO 2005/074583 A2